



The nanoLiter, microliter Pipette and Pipette/MS via IBF.

We seek to license this technology, globally.

[Drew Sauter](#)

nanoLiter LLC
217 Garfield Drive
Henderson, NV 89074
USA
702-882-5413

Visit nanoliter.com
adsauterjr@gmail.com

Induction Based Fluidics

Uses electric fields to non-touch dispense liquids from pipettes, [syringes](#), chips and pumps.

IBF morphs common devices (pipettes, syringes, chips and pumps) into non-touch dispensers of nanoliters and microliters quantities of even **viscous liquids**, like whole blood, serum, polymers, paint & some glues! Internationally unique ! ([IBF physics.](#))

Why nanoLiters ?

- Using 100 nanoliters as compared to 1.0 microliter saves 90% of solvent costs!
- Makes experiments much safer.
- Saves solvent, sample disposal costs.
- Affords new capabilities like flying liquids UP! or in highly parallel manner!

IBF improves the sensitivity of mass spectrometry for ESI and MALDI!

Morphs common devices, (pipettes, microliter syringe and pumps) into the 21st Century version of their predecessors that can dispense non-touch.

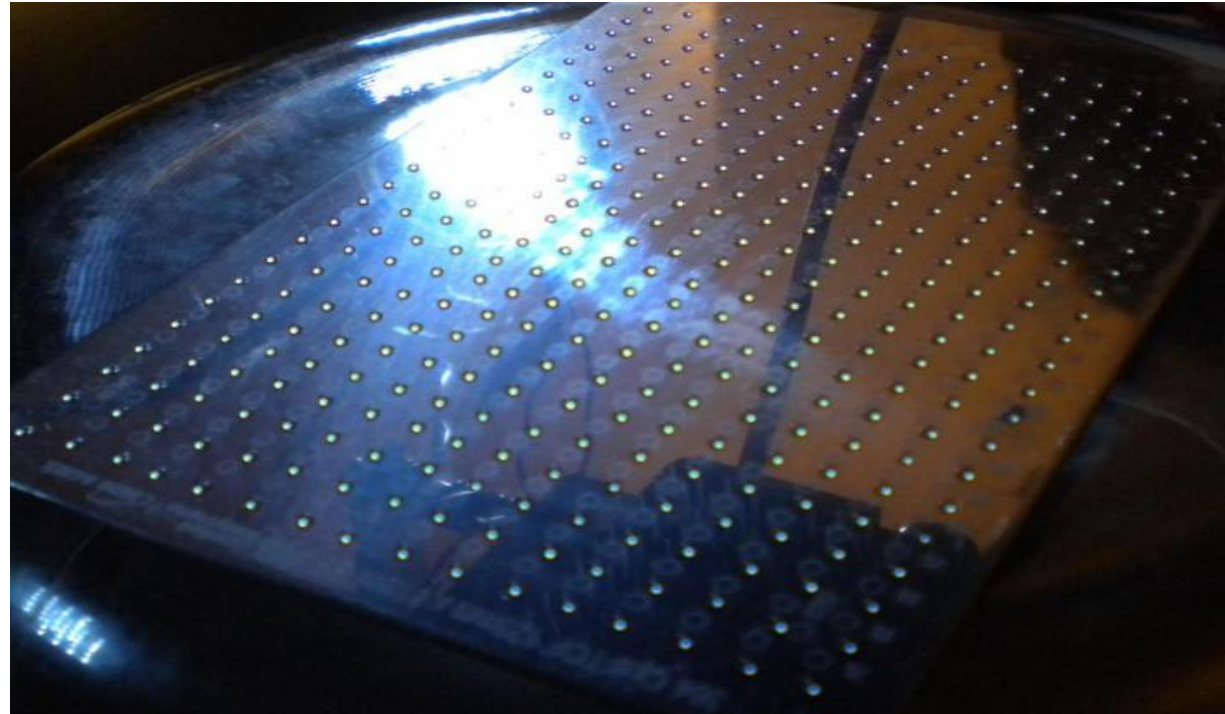
Performance surpasses the most profitable products of Eppendorf, Gilson, Hamilton, Idexcorp and others and it has patented very valuable expendables!



[nanoLiter Cool Wave© Syringe](#)

384 Channel, Parallel, Non-Touch 150 nL Dispense In One Millisecond For MALDI.

[Video](#)

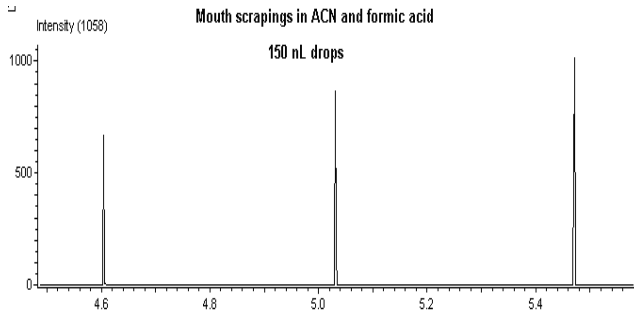


Using our IBF technology appended to a Roche 384 Polypipettor.

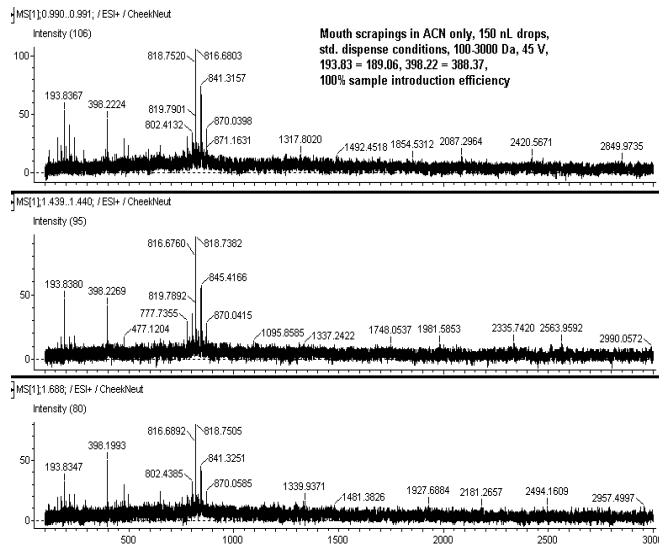
IBF Can Shoot Cells, Whole Blood, Serum Near or Into Mass Spectrometers, Other Targets.

[4 second video clip.](#) 100% of drops, (not a spray!), enters the MS.

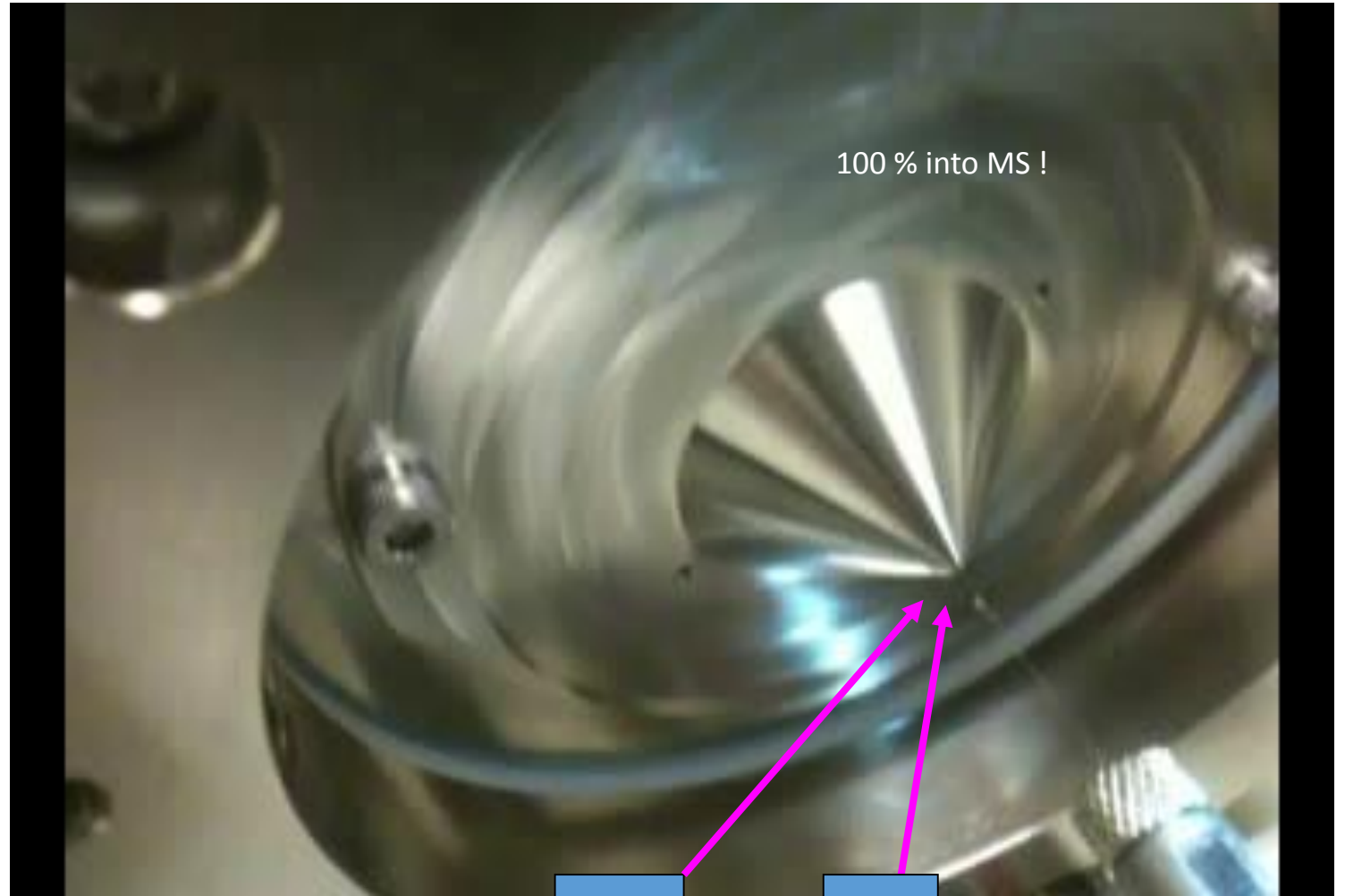
3 Drops into a MS + Spectra.



Spectra called "exciting" by America's greatest mass spectroscopist!



Mass spectra from three 150 nL droplets containing white matter, cells, human saliva.



Cancer, disease cells

Adjacent, healthy cells

We Can Fly liquids from “anything” to “anything.”

[Click here to see the video.](#)



Flying 300 nLs into an ultrasonically levitated 3.0 μ L in 2 milliseconds.

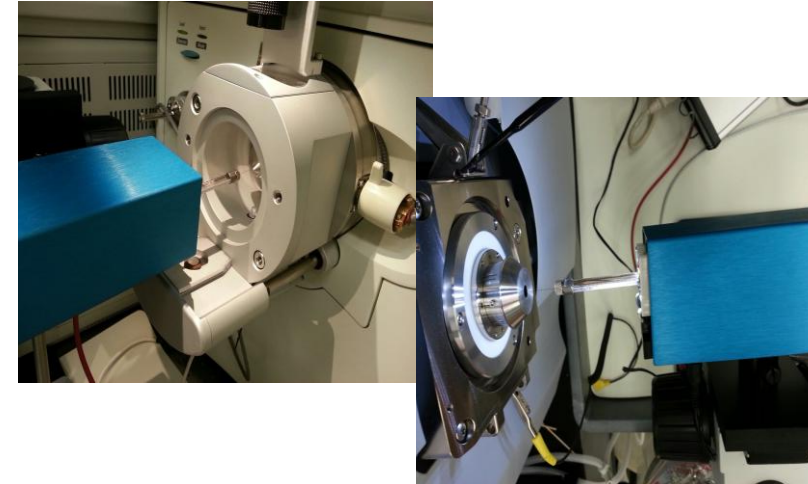
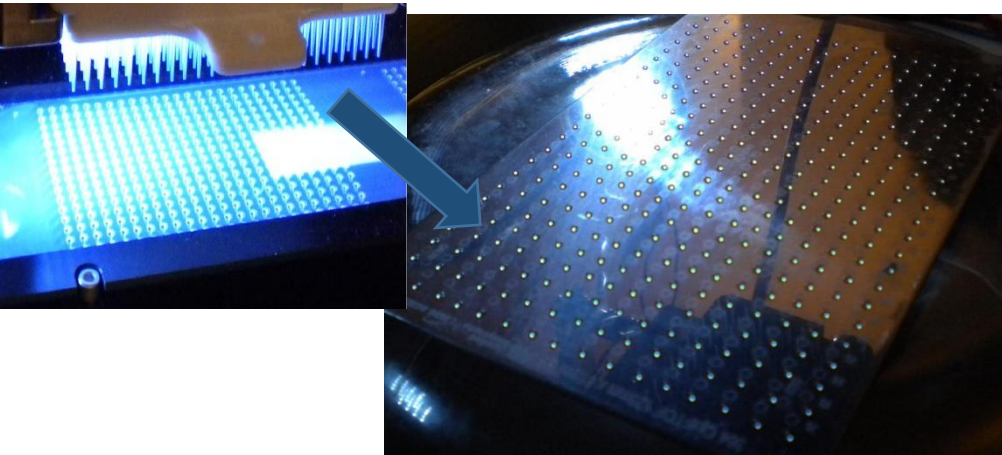
Patented IBF Tech. Can Be Applied To Dispensers From Pipettes, Syringes for MALDI, ESI and More.

Liquids Fly And Are Directed To Targets !!!

384 Channel Parallel Pipette dispense, [video](#).

Sciex offered to license for LC/MALDI.

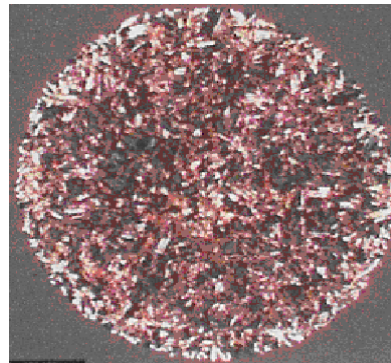
[Syringe MS into a MS.](#)



Dispense viscous liquids



Makes excellent crystals.



LO 3D Print.



Nanoliter

Summary

A few patents, 2 near term OA's, 6-layered pending patents. 80% of IP hidden.

Recent [excellent technology review of microliter syringe](#) device, Select Science.

Two Pharma's paying for related research on 384 and single channel MS devices.

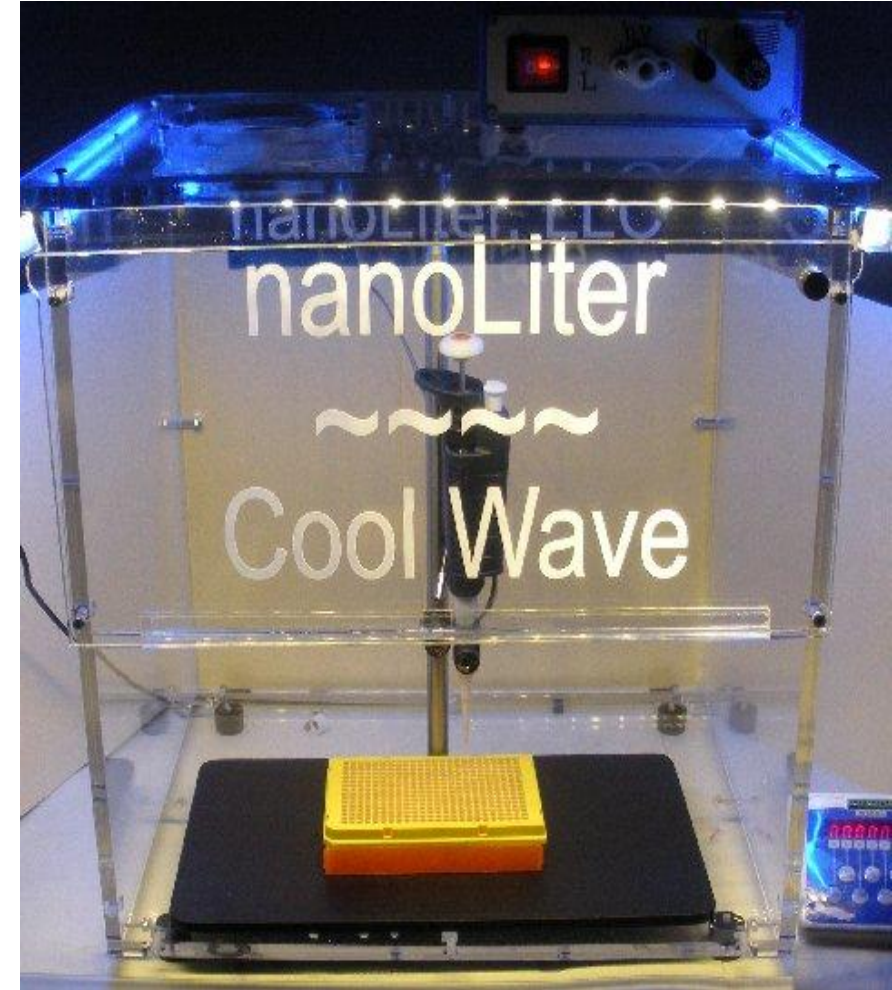
Will introduce pipette/MS at Pittcon 2015 and maybe Asilomar, October 2014.

Many peer review scientific [references](#). Ca. 40 presentations, Pittcon course.

Sciex offered to license IBF for LC/MALDI. Customers, clients:
U's of Ill (5), WI, CA, Cinn., MUSC, Wash. U., USF, USU, US Army ECBC
and Natick, Abbott, Biogen Idec, Genentech, Amgen, Hitachi, Allergan,
Sciex, Spark, Douglas, NIH, NIST, USDOE INL, Ga Tech, Duquesne, others.

[Experienced](#) in nationally birthing new MS, fluidic technology.

Goal: License pipette technology , non-exclusively via lump sum + royalties model.



nanoLiter Cool Wave© pipette
One embodiment.